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### **REMARKS**

Applicant has amended claims 1-8 and 10-17. Claim 9 was previously cancelled. Claims 1-8 and 10-17 remain pending in the application.

The Examiner rejected claim 1 under 35 U.S.C. 112 first paragraph stating that there was insufficient support for the phrase "piecewise continuous carrier signal". Applicant has elected to amend the claims to remove this phrase and to use the phrase "noise signal" which is supported in the specification as filed. Applicant has made reference to the fact that the noise signal has "properties that are constant for a predetermined number of bits and change after the predetermined number of bits." Applicant submits that this is fully supported by the specification as filed and directs the Examiner's attention to the specification which at page 6 line 17 states "...the technique includes the changing of parameters of the 'noise' signal at frequent intervals, viz., after every 'group of bits' so that insufficient samples would be available...". Applicant submits that this clearly discloses a noise signal having properties constant over a number of bits which change after the number of bits.

In view of this amendment, Applicant submits that the matter of claim 1 is fully supported by the specification as filed, and requests that the rejection under 35 U.S.C. 112 first paragraph be withdrawn.

The Examiner rejected claims 1-8 and 10-17 under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,226,491 to Wachs. Applicant submits that the subject matter of claims 1 and 10, as amended, is not taught by the Wachs reference.

Wachs teaches the use of a pseudo-random waveform to modulate the local oscillator about a nominal frequency, which is then used to drive a mixer. The output of the local oscillator is the signal upon which the data signal is modulated (see column 2 at lines 61-66), and corresponds to the "noise signal" in claims 1 and 10. Wachs teaches, with reference to Figure 2 that a pseudo random signal is used as an input to a local oscillator. By the very nature of this combination, the carrier signal will have its properties affected by the application of the pseudo-random number to the local oscillator inputs. Applicant notes, that Wachs does not teach that the properties of the signal will be constant for a number of bits, and will then change. Instead, Wachs constantly changes the properties of the carrier signal. As a result of the

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constant changes to the properties of the carrier signal, Wachs does not teach the equivalent of a "noise signal having properties that are constant for a predetermined number of bits".

Applicant notes, that the claimed method does not manipulate groups of bits in the "noise" signal, and instead only changes the properties of the signal after the predetermined number of bits.

In view of the requirement in claims 1 and 10 for a "noise signal having properties that are constant for a predetermined number of bits and change after the predetermined number of bits", Applicant submits that claims 1 and 10, as amended, are novel in view of the Wachs reference, and requests that the rejection to claims 1 and 10 under 35 U.S.C. 102(e) be withdrawn.

The Examiner further rejected claims 1-8 and 10-17 as anticipated by U.S. Patent No. 5,982,809 to Liu et al. The Examiner makes specific reference to Column 12, lines 32-50 which states that "In a direct sequence spread spectrum communication system, wherein digital spread spectrum signals modulated...comprising the steps of receiving digital spread spectrum signals modulated with a pseudo-random sequence..." Applicant directs the Examiner's attention to Figure 2 of the Liu reference which indicate that the data signal is modulated onto a pseudo-random sequence provided by the PN-code generator 30. Applicant submits that PN generators do not provide a "noise signal having properties that are constant for a predetermined number of bits and change after the predetermined number of bits", as recited in amended claims 1 and 10, and instead generate either a sequence that has no constant properties, or properties that are constant and unchanging. Liu makes no reference to the generation of a signal or sequence that has properties that change after a predetermined number of bits. Applicant submits that claims 1 and 10 are novel in view of the Liu reference. Accordingly, Applicant requests that the rejection of claims 1 and 10 under 35 U.S.C. 102(e) be withdrawn.

Claims 2-8 depend either directly or indirectly from claim 1, and claims 11-17 depend either directly or indirectly from claim 10. As such, these claims include the limitations of the independent claim from which they depend. Accordingly, Applicant submits that these claims are no broader than the independent claim from which they depend, and re-iterates the

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arguments presented above with respect to claims 1 and 10 and applies them to the dependent claims 2-8 and 11-17. In view of these arguments, Applicant requests that the rejection of claims 2-8 and 11-17 under 35 U.S.C. 102(e) be withdrawn.

The Commissioner is hereby authorized to charge any additional fees, and credit any over payments to Deposit Account No. 501593, in the name of Borden Ladner Gervais LLP.

Submitted,

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